

PIPING PLOVER UTILIZATION OF THE MASON INLET RELOCATION PROJECT AREA, NORTH CAROLINA. Wm. David Webster, Department of Biological Sciences, University of North Carolina at Wilmington, Wilmington, NC 28403-5915; Phone: (910) 962-3756; Fax: (910) 962-4066; webste@uncw.edu.

Piping Plover (*Charadrius melodus*) surveys have been conducted in the Mason Inlet Area of southeastern North Carolina for four years, one before Mason Inlet was relocated (2001) and three post-project (2002-2004). Surveys were conducted on foot, typically once each week, on both islands flanking Mason Inlet (Figure Eight Island to the north and Wrightsville Beach to the south) and at the inlets immediately north (Rich Inlet) and south (Masonboro Inlet) of Mason Inlet; however, surveys were conducted daily during the construction phase of the relocation project. Three groups of Piping Plovers (fall migrants, winter residents, and spring migrants) were documented each year, and some banded individuals were observed repeatedly within and among years. Fall migrants began to move through the area in early August and peaked in early September, winter residents typically arrived in November and remained until February, and spring migration peaked in mid-March and ended in early May. Piping Plovers did not nest in the Mason Inlet area. The Mason Inlet Relocation Project occurred in early spring 2002, and disruption associated with this project caused spring migrants to skip the Mason Inlet shoals and stop to rest and forage in the Rich Inlet area. Likewise, fall migrants avoided Mason Inlet in 2002, again preferring to stop at Rich Inlet before continuing southward out of the study area. Since then, an expansive system of mudflats formed on the sound side of Mason Inlet. These mudflats, when exposed at low tide, have become a favored foraging and resting site for Piping Plovers.